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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,592	08/28/2001	Yoshio Komaki	018656-243	3266

7590 04/19/2007  
Platon N. Mandros  
Burns, Doane, Swecker & Mathis, L.L.P.  
P.O. Box 1404  
Alexandria, VA 22313-1404

EXAMINER
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DANG, DUY M

ART UNIT	PAPER NUMBER
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2624

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/19/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

09/939,592

Applicant(s)

KOMAKI, YOSHIO

Examiner

Duy M. Dang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 and 12-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

1. Applicant's amendment filed on 1/29/07 has been entered and made of record.

#### ***Response to Arguments***

2. Applicant's arguments filed 1/29/07 have been fully considered but they are not persuasive.

Applicant's amendment overcomes the rejection of claims 10 and 18 under section 35 U.S.C. 101.

In response to applicant's arguments with regard to the rejection of claims 1-3, 6-10, and 12 under section 35 USC 103, the examiner would like to offer the remarks as follows. First, applicant is reminded that the examiner is entitled to give the broadest reasonable interpretation to the language of the claims. The examiner is not limited to applicant's definition which is not specifically set forth in the claims. See *In re Tanaka et al.*, 193 USPQ, (CCPA) 1977. Lastly, in this case, amended claim 1, for example, recites "correction parameters for motion image" and "selected correction parameters are maintained for each frame image until the next scene change information is required". Likewise, in *Sekine*, the correction parameters ( $CV_i$ ,  $MV_i$ ,  $Kc$ ,  $CV_{i-1}$ ) for motion image are maintained until the next scene change information (S3 of figure 3). The values of these correction parameters in *Sekine* may be changed but the parameters are the same and/or maintained. Since the claimed features only refer to "correction parameters" and do not require the values of "correction parameters", *Sekine* meets the claimed invention.

In response to applicant's argument with regard to the rejection of claims 4-5 and 13-19 under section 35 USC 103 as set forth at pages 10-13, the examiner's responses as set forth above are incorporated herein.

***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1-3, 6-10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekine et al. (USPN 6,049,354. Referred as “Sekine” hereinafter) in view of White et al. (USPN 5,721,427. Referred as “White” hereinafter).

The advanced statements set forth in paragraph 3 of the previous Office Action mailed on November 11, 2005 are incorporated herein.

The advanced statements set forth in paragraph 3 of the Final Office action mailed on April 07, 2006 are incorporated herein.

With regard to the scope of the newly added features “correction process is maintained for each frame image until next scene change information acquired” to claim 1 as a representative claim, Sekine teaches these claimed features as described in figure 3. That is, the image-shake correction depicted at S4, for example, performs image correction until the incoming image immediately follows a scene change as depicted at S3 and described at column 5 lines 1-45. The same analysis is also applied to the amended claims 7, 9-10, and 12.

5. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekine in view of White as applied to claims 1-3, 6-10, and 12 above, and further in view of Horiike (USPN 6,353,683. Referred as Horiike hereinafter).

The advanced statements as set forth in the preceding paragraph 4 are incorporated herein. It is noted that the combination Sekine and White fails to specifically teach the features of “wherein the acquiring portion generates the scene change information based on a differential

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image of an image of a current frame and a predicted image of the current frame predicted from an image of a previous frame from the current frame” as required by claim 4. However, such claimed features are well known in the art as evidenced by the patent to Horiike.

Horiike teaches, in the same field of invention that of image prediction, wherein the acquiring portion (i.e., 100 of figure 1) generates the scene change information based on a differential image of an image of a current frame and a predicted image of the current frame predicted from an image of a previous frame from the current frame (See figure 1. Note that the “Bgd” outputted from subtracter 106 corresponds to the so called “scene change information”; the input “Pg1” to subtracter 106 from calculation unit 120 corresponds to the so-called “predicted image of the current frame predicted from an image of a previous frame from the current frame”). The motivation to do so is to reduce calculation because only the difference is coded instead of the whole image thereby, reduce data coded for transmission and receiving. This also reduces temporal redundancy as suggested by Horiike in column 1 lines 15-25.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate such claimed features as taught by Horiike in combination with the combination of Sekine and White for that reasons.

Regarding claim 5, Horiike further teaches wherein the determining portion determines a correction process based on the predicted image (i.e., the subtracter 106 and motion compensation 122 in figure 1 refer to the so-called correction process).

6. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekine in view of Horiike.

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The advanced statements as set forth in the paragraph 4 of the Office action mailed on November 01, 2005 with regard to Sekine as applied to claims 1-3, 6-10 and 12 are incorporated herein.

While Sekine fails to specifically teach the features of “wherein the acquiring portion generates the scene change information based on a differential image of an image of a current frame and a predicted image of the current frame predicted from an image of a previous frame from the current frame” as further required by claim 13, Sekine does teach the utilization of inter-frame coding as described in column 17 lines 31-33. However, such claimed features are taught by Horiike for example.

Horiike teaches, in the same field of invention that of image prediction, wherein the acquiring portion (i.e., 100 of figure 1) generates the scene change information based on a differential image of an image of a current frame and a predicted image of the current frame predicted from an image of a previous frame from the current frame (See figure 1. Note that the “Bgd” outputted from subtracter 106 corresponds to the so called “scene change information”; the input “Pg1” to subtracter 106 from calculation unit 120 corresponds to the so-called “predicted image of the current frame predicted from an image of a previous frame from the current frame”). The motivation to do so is to reduce calculation because only the difference is coded instead of the whole image thereby, reduce data coded for transmission and receiving. This also reduces temporal redundancy as suggested by Horiike in column 1 lines 15-25.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate such claimed features as taught by Horiike in combination with Sekine for that reasons.

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Regarding claim 14, Horiike further teaches wherein the determining portion determines a correction process based on the predicted image (i.e., the subtracter 106 and motion compensation 122 in figure 1 refer to the so-called correction process).

7. Claims 15-19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sekine in view of White as applied to claims 1-3, 6-10, and 12 above, and further in view of Prentice et al. (US Pub 2003/0030729. Referred as "Prentice" hereinafter).

The advanced statements set forth in the preceding paragraph 6 with regard to the combination of Sekine and White as applied to claims 1-3, 6-10, and 12 are incorporated herein.

Regarding claim 15 as a representative claim, the combination of Sekine and Horiike fails to teach wherein the correction process is for correcting the image in terms of at least one of tone, hue, chroma, brightness and contrast. However, such claimed features are disclosed by Pretence, figure 7, for example. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate claimed features as taught by Prentice in combination with the combination of Sekine and White in order to allow for optimization of processing in separate modes and enhance image quality visually.

Likewise, claims 17-19 are also rejected for the same reasons as set forth in claim 15 above.

8. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sekine in view of Horiike as applied to claims 13-14 above, and further in view of Prentice et al. (US Pub 2003/0030729. Referred as "Prentice" hereinafter).

The advanced statements set forth in the preceding paragraph 6 with regard to the combination of Sekine and Horiike as applied to claims 13-14 are incorporated herein.

Regarding claim 20, the combination of Sekine and Horiike fails to teach wherein the correction process is for correcting the image in terms of at least one of tone, hue, chroma, brightness and contrast. However, such claimed features are disclosed by Pretence, figure 7, for example. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate claimed features as taught by Prentice in combination with the combination of Sekine and Horiike in order to allow for optimization of processing in separate modes and enhance image quality visually.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duy M. Dang whose telephone number is 571-272-7389. The examiner can normally be reached on Monday to Friday from 6:00AM to 2:30PM.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached on 571-272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

dmd  
4/12/07



**DUY M. DANG**  
**PRIMARY EXAMINER**